TRANSMITTAL#: 84
DATE: 07/28/2005
TRICARE CHANGE #: N/A

CHAMPVA POLICY MANUAL

CHAPTER: 2
SECTION: 30.12
TITLE: RADIATION THERAPY

AUTHORITY: 38 CFR 17.270(a) and 17.272(a)

RELATED AUTHORITY: 32 CFR 199.4(b)(2)(c)(2)(c)(3) and (g)(15)

I. EFFECTIVE DATES

A. March 27, 1991, for Brachytherapy.

B. July 24, 1992.

C. April 26, 1996, Proton Beam Therapy/External Beam Radiation for the treatment of prostate cancer.

II. PROCEDURE CODE(S)

77261-77499, 77750-77799, 79440

III. DESCRIPTIONS

A. Radiation therapy is the branch of medicine that utilizes ionizing radiation in the treatment of malignant neoplasms. The primary purpose of radiation therapy is to eliminate or shrink localized cancers (as opposed to cancers that have spread to distant parts of the body). Radiation therapy is also known as radiotherapy, radiation treatment, x-ray therapy, cobalt therapy, and proton beam therapy.

B. Radiation therapy (sometimes called radiotherapy, x-ray therapy, or irradiation) is the treatment of malignant disease/tumors, using penetrating beams of high-energy waves or streams of particles called radiation. Radiation therapy can be given in two ways.

1. External radiation therapy. The radiation comes from special machines or from radioactive substances that emits specific amounts of radiation at the tumors or areas where there is disease. Radiation therapy is usually given once daily in a dose that is based on the type and location of the tumor or disease. In hyperfractionated radiation therapy, the daily dose is divided into smaller doses that are given more than once a day. The radiation treatments are usually separated by four to six hours

2. Internal radiation therapy. Brachytherapy is a form of internal radiation. Implant radiation therapy, interstitial radiation therapy, and intracavitary radiation are synonymous terms for brachytherapy. Instead of using a large radiation machine, the radioactive material is sealed in a small holder called an implant. The implant is permanently or temporarily placed directly into the tumor or inserted into the body cavity near the affected area. Implants may be in the form of thin wires, plastic tubes (catheters), capsules or seeds. Commonly used radioactive materials include gold (198 Au), iodine (125 I), Iridium (192 lr), californium (252 Cf), cesium (137 Cs), and palladium (103 pd).

IV. POLICY

A. Radiation therapy (brachytherapy, fast neutron, hyperfractionated, and radioactive chromic phospate synviorthesis) is covered for those indications documented by reliable evidence as safe, effective and comparable or superior to standard care (proven).

B. Hyperfractionated radiation therapy is the use of multiple small fractions of radiation given two or more times per day. Benefits may be extended for hyperfractionated radiation therapy when determined to be medically necessary and appropriate.

1. There are no categorical limitations on the use of hyperfractionated radiation therapy. Indications and patient selection will vary as with any other form of radiotherapy.

2. The ideal tumor cell characteristics for hyperfrationation treatment are as follows:

a. Continuous destruction of the tumor cell as reflected by an absence of a shoulder on the cell survival curve

b. An otherwise radiosensitive tumor cell line

c. Short cell cycle time

d. High growth fraction. These characteristics are typical for small cell carcinoma of the lung, many pediatric tumors, and most lymphomas.

3. The following is a list of conditions for which hyperfractionated radiation therapy has been used: (<u>This list is not all inclusive and should not be used as such.)</u>

a. Advanced head and neck cancers

b. Glioblastomas

c. Lung cancers

d. Malignant astrocytoma

e. Malignant lymphomas

f. Pediatric brainstem glioma

g. Soft tissue sarcoma

C. Benefits may be extended for fast neutron radiotherapy for treatment of adenoid cystic carcinoma and malignant salivary gland tumors.

D. Radioactive chromic phosphate synoviorthesis in the treatment of hemophilia patients with hemarthrosis and/or synovitis is covered when the medical record documents that more conservative therapies have failed.

1. 79440 Intra-articular radionuclide therapy

2. 77750 Infusion or instillation of radioelement.

V. POLICY CONSIDERATIONS

A. There are no categorical limitations on the use of brachytherapy. Indications and patient selection will vary as with any other form of radiotherapy.

B. Following is a list of conditions for which brachytherapy has been used. This list is not all-inclusive and should not be used as such.

1. Brain tumors, alone or combined with external beam radiation therapy

2. Cervical, uterine and prostate cancer

3. Palliative treatment of bronchogenic carcinoma

4. Adjuvant therapy of:

a. Bile duct carcinoma

b. Bladder carcinoma

c. Breast cancer

d. Childhood and adult sarcomas

e. Choroidal melanoma

f. Esophageal carcinoma

g. Head and neck cancer

h. Intracoronary brachytherapy with ribbons containing seeds that emit gamma radiation to treat patients with in-stent restenosis of saphenous vein bypass grafts is a covered benefit.

i. Liver metastases

j. Pancreatic carcinoma

k. Rectal carcinoma

l. Renal cell carcinoma

m. Retinoblastoma

n. Sacral chordoma

o. Skin cancer

p. Vaginal and vulvar carcinoma

VI. EXCLUSIONS

A. Intracoronary brachytherapy to treat in-stent restenosis of saphenous vein bypass grafts using radioactive sources, such as alpha or beta radiation, or delivered via by other methods, such as radioactive stents or catheter balloons filled or coated with radioactive material.

B. Intracoronary brachytherapy using any radiation source or delivery method to manage de novo-lesions or treat restenosis in native or grafted coronary vessles without stents.

C. Brachytherapy as the sole radiation after breast-conserving surgery for early stage breast cancer.

D. Peripheral artery brachytherapy as an adjunct to percutaneous transluminal angioplasty for the prevention of restenosis in the femoropopliteal system.

E. Brachytherapy treatment for epithelial ovarian cancer.

END OF POLICY